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10/661,567

09/15/2003

Alexander Manu

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08/13/2008

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ST. JOSEPH, MI 49085

EXAMINER

MARTINEZ, BRITTANY M

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---|--|--|
| Office Action Summary | Application No. 10/661,567 | Applicant(s) MANU, ALEXANDER | |
| | Examiner BRITTANY M. MARTINEZ | Art Unit 1793 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 63-66 and 68-95 is/are pending in the application.
- 4a) Of the above claim(s) 79-93 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 63-66, 68-78, 94 and 95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/31/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

Applicant's arguments/remarks and amendments filed on May 9, 2008, have been carefully considered. **Claims 63-66 and 68-95** are pending in the instant application. **Claims 62 and 67** were canceled, **Claims 94-95** were added, and **Claims 63-66, 68-71, 73-74, and 76** were amended in Applicant's response, filed May 9, 2008. **Claims 63-66, 68-78, and 94-95** have been examined. **Claims 79-93** are withdrawn from further consideration pursuant to CFR 1.12(b) as being drawn to a nonelected invention.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 49 (sink bottom), 10A-101 (various bricks or solids of different shapes), 101 ("brick in the upper left hand corner of Figure 2B"), .

1. The drawings are objected to for the following reasons:

- In the detailed description of Figure 7, the specification refers to gate 52 in part A (S. 23, 18); however, gate 52 is not labeled in part A of Figure 7.
- In Figure 5, reference characters "32" and "30" both refer to the same aspect of the figure and should be separated in order to accurately depict the apparatus.

1. The drawings are further objected to because Figures 2A, 2B, 5, 6, and 8 are not of sufficient quality for reproduction in a printed patent document. Refer to 37 CFR 1.84(b). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Abstract

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly

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those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

3. The abstract of the disclosure is objected to because it exceeds 150 words in length, utilizes words that lack antecedent basis, and contains indefinite language.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in the prior Office Action.

4. **Claims 64, 66, 68, and 94** are rejected under 35 U.S.C. 103(a) as being unpatentable over Warren (US 2002/0060428 A1).

5. With regard to **Claim 94**, Warren discloses a process for producing a biodegradable solid of organic waste comprising: composting organic waste; mixing the composted organic waste with a biodegradable binder to form a mixture; and forming a unitary biodegradable solid from the mixture by drying the mixture wherein the

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composted organic waste is converted to a unitary biodegradable solid (Warren, p. 1, 0009-0011; p. 2, 0011-0015; p. 3, 0022-0024 and 0028; p. 4, 0031).

6. With regard to **Claim 64**, Warren discloses composting the organic material before it is dried (Warren, p. 2, 0011-0015; p. 4, 0031).

7. With regard to **Claims 66 and 68**, Warren discloses forming the mixture into a shape (Warren, p. 3, 0028; p. 4, 0031); and drying of the mixture further comprising heating (Warren, p. 4, 0031).

8. Warren does not explicitly disclose reducing raw organic waste to pieces (**Claim 94**).

9. With regard to **Claim 94**, Warren further discloses that composting is used to refer to decomposition or digestion of a material (Warren, p. 3, 0022). It would have been obvious to one of ordinary skill in the art that composting an organic material is an obvious variant of reducing an organic material to pieces.

10. **Claims 65 and 74-78** are rejected under 35 U.S.C. 103(a) as being unpatentable over Warren (US 2002/0060428 A1) as applied to **Claim 94** above, and further in view of Kazemzadeh (US 5,772,721).

11. With regard to **Claim 65**, Warren discloses forming the mixture comprising mixing the composted organic waste with a liquid (Warren, p. 3, 0028).

12. With regard to **Claims 75 and 77**, Warren discloses a carbohydrate as the biodegradable binder (Warren, p. 2, 0014).

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13. Warren does not explicitly disclose mixing the composted organic waste with water (**Claim 65**); the water or biodegradable binder in the mixture being derived from the raw organic waste (**Claim 74**); or the heat activation of the biodegradable binder (**Claims 76 and 78**).

14. With regard to **Claims 65, 76, and 78**, Kazemzadeh discloses combining organic waste material, a carbohydrate binder, and water to form organic and semi-organic, substantially odorless solid fertilizers (Kazemzadeh, c. 1, l. 5-10; c. 2, l. 42-51; c. 5, l. 9-11, 25-26, and 41-51); wherein the biodegradable carbohydrate binder is heat activated (Kazemzadeh, c. 2, l. 48-51).

15. With regard to **Claim 74**, the presence of water and/or carbohydrates in reduced organic waste would have been common knowledge to a person of ordinary skill in the art at the time of the invention.

16. Thus, it would have been obvious to one of ordinary skill in the art to modify the process disclosed by Warren with the water and heat activated binder as taught by Kazemzadeh because one of ordinary skill in the art could have pursued the known potential options for maximizing process efficiency and minimizing process costs within his or her technical grasp with a reasonable expectation of success.

17. **Claims 63, 69-72, and 95** are rejected under 35 U.S.C. 103(a) as being unpatentable over Warren (US 2002/0060428 A1) as applied to **Claims 94 and 68** above, and further in view of Kubota et al. (US 5,634,600).

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18. Warren does not explicitly disclose reducing the organic waste after it is dried (**Claim 63**); the removal of liquid water from the organic waste mixture (**Claim 69**), the reuse of the recovered water (**Claim 70**), the capture of water vapor resulting from drying of the shaped organic waste mixture (**Claim 71**), the conversion of the captured water vapor to liquid water (**Claim 72**), or drying the mixture to a moisture content at which it is free of odors caused by microbial activity (**Claim 95**).

19. With regard to **Claims 63, 69-72, and 95**, Kubota discloses reducing the organic waste post drying (Kubota, Claim 2); removal of liquid water from the organic waste mixture, the reuse of the recovered water (Kubota, c. 1, l. 13-24), the capture of water vapor resulting from drying of the shaped organic waste mixture, the conversion of the captured water vapor to liquid water (Kubota, c. 1, l. 13-24 and 45-63), and drying of the raw organic waste to a moisture content characteristic of lack of malodor (Kubota, c. 1, l. 29-35; c. 4, l. 45-67).

20. Thus, it would have been obvious to one of ordinary skill in the art to modify the process taught by Warren with the water treatment/process step order taught by Kubota in order to maximize the efficiency of waste processing, minimize wasteful use of water, and obtain a more desirable end-product.

21. **Claim 73** is rejected under 35 U.S.C. 103(a) as being unpatentable over Warren (US 2002/0060428 A1) and Kubota et al. (US 5,634,600) as applied to **Claims 71-72** above, and further in view of Krulik (US 2004/0108277 A1).

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22. The aforementioned applied art does not explicitly disclose the liquid water obtained from the conversion of the captured water vapor being reused in a subsequent process for producing a unitary biodegradable solid (**Claim 73**).

23. With regard to **Claim 73**, Krulik discloses economical treatment of organic materials comprising methods of minimizing waster water discharges from, and fresh water inputs to, manufacturing processes (Krulik, p. 3, 0030). Krulik further discloses recycling water from one portion of a process to other process loops within the same process with high efficiency (Krulik, p. 3, 0030).

24. Thus, it would have been obvious to one of ordinary skill in the art to modify the process disclosed by the aforementioned applied prior art with the water reuse as taught by Krulik because one of ordinary skill in the art could have pursued the known potential options for maximizing process efficiency and minimizing process costs within his or her technical grasp with a reasonable expectation of success.

Response to Amendments

Applicant's amendments, filed May 9, 2008, with respect to the title, specification, and claims have been fully considered and are accepted. The objections to the title and specification, filed October 31, 2007, and the 35 U.S.C. § 112 claim rejections, filed October 31, 2007, have been withdrawn. It is noted that Applicant did not amend the instant abstract. Thus, the objection to the abstract in the previous Office Action stands. Further, while Applicant's amendments to the instant specification remedied several of

the objections to the instant drawings made in the previous Office Action, Applicant did not submit amended drawings. Thus, several of the objections to the drawings in the previous Office Action stand, and new objections to the drawings were necessitated by Applicant's amendment of the instant specification.

Response to Arguments

1. Applicant's arguments, filed May 9, 2008, regarding the Claim Rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a), filed October 31, 2007, have been fully considered but they are not persuasive.
2. In response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which Applicant relies (i.e., the biodegradable binder (in regard to the 35 U.S.C. § 102(b) rejection) or unitary biodegradable solid of **Claim 94** and the end-product "block" of the instant invention possibly being placed in a garden or similar environment where it could eventually function as a fertilizer) were not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
3. Applicant's cancellation of **Claim 62** is acknowledged. Cancellation of **Claim 62** and the amendment of **Claim 63** render the rejection of **Claims 62-63** under 35 U.S.C. § 102(b) as anticipated by Kubota et al. (US 5,634,600) moot.
4. In response to Applicant's argument that Enfield does not teach a biodegradable end-product, and in fact teaches away from the instant invention by teaching an end-

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product useful as a construction or building material (in which a biodegradable material would be unsuitable), Examiner respectfully disagrees. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

5. In response to Applicant's argument that "In fact, the combination with Enfield actually teaches away from the invention. The combination based on Enfield converts the organic waste, in this case the dust from Kubota, to structural building material, which must be non-biodegradable to function as a building material. The combination does not care about the nature of the organic waste because the sheet formed from the waste is encased in cement to form the building material," Examiner respectfully disagrees. First, Enfield was used as the primary reference in the 35 U.S.C. § 103(a) rejection of **Claims 64-78** as being unpatentable over Enfield (US 3,819,456) in view of Kubota et al. (US 5,634,600). Enfield was *not* used in the rejection to convert the dust of Kubota to a structural building material. Refer to page 13 of the previous Office Action. Enfield was used to disclose the primary process for processing of organic waste. Kubota was used to disclose the heating of the shaped end-product of Enfield; the removal of liquid water from the organic waste mixture of Enfield, the reuse of the recovered water, the capture of water vapor resulting from drying of the shaped organic waste mixture, the conversion of the captured water vapor to liquid water, and the reuse of the captured water. Second, the end-product resulting from the combination of Enfield and Kubota would not necessarily be the end-product

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resulting from Enfield alone. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

6. Applicant's argument that neither Enfield nor Kubota disclose re-use of liquid water converted from the captured water vapor emitted while drying a mixture is acknowledged. However, due to Applicant's amendment of the instant independent claims, a new art rejection was necessary. **Claim 73** is now rejected under 35 U.S.C. § 103(a) over Warren (US 2002/0060428 A1) and Kubota et al. (US 5,634,600) as applied to **Claims 71-72**, and further in view of Krulik (US 2004/0108277 A1), as discussed above.

7. Applicant's arguments with regard to new claim, **Claim 94**, are acknowledged but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRITTANY M. MARTINEZ whose telephone number is (571) 270-3586. The examiner can normally be reached Monday-Friday 9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached at (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wayne Langel/
Primary Examiner, Art Unit 1793

BMM

/Brittany M Martinez/
Examiner, Art Unit 1793